

~~920629MT3~~ ORIGINAL

GARDNER, CARTON & DOUGLAS

1301 K STREET, N.W.

SUITE 900, EAST TOWER

WRITER'S DIRECT DIAL NUMBER

WASHINGTON, D.C. 20005

John E. Fiorini III  
(202) 408-7159

(202) 408-7100  
FACSIMILE: (202) 289-1504

JUN 30 2 33 PM '92  
CHICAGO, ILLINOIS

RECEIVED

June 11, 1992

JUN 29 1992

Ms. Donna R. Searcy  
Secretary  
Federal Communications Commission  
Washington, D.C. 20554

Federal Communications Commission  
Office of the Secretary

Re: Amendment to BPH920326MA

Dear Ms. Searcy:

Transmitted herewith in triplicate is an amendment to the above-referenced application of Victory Christian Center, Incorporated, for a construction permit for a new FM station at Harrisburg, North Carolina. Please take note that this amendment is to be processed under Section 73.215 of the Rules.

Kindly direct any questions concerning this matter to the undersigned.

Sincerely,

  
John E. Fiorini III

JEF/eaf  
65893-001\3293

FM EXAMINERS

JUN 1 8 34 AM '92

RECEIVED

RECEIVED  
ORIGINAL JUN 29 1992

Amendment

Federal Communications Commission  
Office of the Secretary

The application (BPH 920326MA) of Victory Christian Center, Incorporated, for a construction permit for a new FM broadcast station at Harrisburg, North Carolina, is amended as follows:

1. Section II, Item 9, is amended to state that in the event the subject application is granted, the applicant will timely divest itself of all its interest in radio station WOCR(AM), Charlotte, North Carolina.

2. Section V-B is amended by deleting Section V-B and associated exhibits currently on file, and by substituting therefor the attached Section V-B and associated exhibits.

3. Section VII is amended by deleting Section VII, Items 2 and 3, currently on file, and by substituting therefor the attached Section VII, Items 2 through 4.

6/28/92  
Date

X Wge K. K. [Signature]

SECTION VI - EQUAL EMPLOYMENT OPPORTUNITY PROGRAM

1. Does the applicant propose to employ five or more full-time employees?

☐ Yes ☐ No

On file; no change

If Yes, the applicant must include an EEO program called for in the separate Broadcast Equal Employment Opportunity Program Report (FCC 396-A).

SECTION VII - CERTIFICATIONS

1. Has or will the applicant comply with the public notice requirement of 47 C.F.R. Section 73.3680?

☐ Yes ☐ No

On file; no change

2. Has the applicant reasonable assurance, in good faith, that the site or structure proposed in Section V of this form, as the location of its transmitting antenna, will be available to the applicant for the applicant's intended purpose?

☒ Yes ☐ No

No, attach as an Exhibit, a full explanation.

Exhibit No.  
N/A

3. If reasonable assurance is not based on applicant's ownership of the proposed site or structure, applicant certifies that it has obtained such reasonable assurance by contacting the owner or person possessing control of the site or structure.

Name of Person Contacted

Michael Pratt

Telephone No. (include area code)

704-547-9780

Person contacted: (check one box below)

☐ Owner

☒ Owner's Agent

☐ Other (specify)

4. The applicant certifies that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits pursuant to Section 5601 of the Anti-Drug Abuse Act of 1988, 21 U.S.C.

☒ Yes ☐ No

a. or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b).

The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with 47 C.F.R. Section 1.85, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

VICTORY CHRISTIAN CENTER, INCORPORATED  
ENGINEERING MATERIAL IN SUPPORT OF A NEW FM STATION  
AT HARRISBURG, NORTH CAROLINA

SEEKS: Channel 224A  
92.7 mc, 6 kw H&V, 100 m HAAT

Prepared by:

York David Anthony  
Justine Hope Lambert  
Lambert & Anthony  
2613 Craig Avenue  
Concord, NC 28027

VICTORY CHRISTIAN CENTER, INCORPORATED  
NEW FM, HARRISBURG, NORTH CAROLINA

TABLE OF CONTENTS

<u>FCC Form 301, Section V-B</u> .....	1
<u>EXHIBIT 1: FAA Notification</u> .....	7
<u>EXHIBIT 2: TOWER ELEVATION SKETCH and PLAN SKETCH</u> .....	8
<u>EXHIBIT 3: DIRECTIONAL ANTENNA</u>	
Statement of 73.316 Compliance .....	9
Azumith Plot of Relative Field .....	11
Tabulated Azumith Pattern .....	12
Conical Plot of Relative Field .....	13
Tabulated Conical Pattern .....	14
Tabulated Fields used in Allocation Study .....	15
Statement of Antenna Manufacturer .....	16
Mechanical Data for Ordering Antenna .....	18
<u>EXHIBIT 4: 73.215 PROCESSING REQUEST</u> .....	20
Standard 73.207 Allocation Study .....	21
Tabulation of Relative DA Field and HAAT for 1° Increment .....	24
Tabulated Distance to Service Contours .....	25
Tabulated Distance to Interference Contours .....	26
73.215 Allotment Study .....	27
Overall 73.215 Plot of WZNS and Proposal .....	30
Expanded 73.215 Plot of WZNS 54 dBuV and Prop. 60 dBuV ..	31
<u>EXHIBIT 5: INTERMODULATION AND BLANKETING STATEMENT</u> .....	32
<u>EXHIBIT 6: ORIGINAL 1:24000 (7.5 Minute) USGS Quadrangle, Harrisburg</u>	34
<u>EXHIBIT 7: 73.315 MAP SHOWING</u> .....	35
<u>EXHIBIT 8: ENVIRONMENTAL AND OCCUPATIONAL SUPPLEMENTAL STATEMENT ...</u>	36
<u>EXHIBIT 9: EMERGENCY POWER STATEMENT</u> .....	37

# Section V-B - FM BROADCAST ENGINEERING DATA

FOR COMMISSION USE ONLY

File No. \_\_\_\_\_

ASB Referral Date \_\_\_\_\_

Referred by \_\_\_\_\_

Name of Applicant

VICTORY CHRISTIAN CENTER, INCORPORATED

Call letters (if issued)

Is this application being filed in response to a window? ☐ Yes ☒ No

If Yes, specify closing date: \_\_\_\_\_

Purpose of Application: (check appropriate boxes)

☒ Construct a new (main) facility  
\* AMENDMENT \*

☐ Construct a new auxiliary facility

☐ Modify existing construction permit for main facility

☐ Modify existing construction permit for auxiliary facility

☐ Modify licensed main facility

☐ Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

☒ Antenna supporting-structure height

☐ Effective radiated power

☐ Antenna height above average terrain

☐ Frequency

☒ Antenna location

☐ Class

☐ Main Studio location

☒ Other (Summarize briefly)

AMENDMENT OF OUTSTANDING APPLICATION  
# 920326 MA

File Number(s) ( 920326MA )

## 1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
2 2 4 A	HARRISBURG	CABARRUS	N C

Class (check only one box below)

☒ A ☐ B1 ☐ B ☐ C3  
☐ C2 ☐ C1 ☐ C

## 2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.

0.32 km @ 335°T FROM JUNCTION OLD CONCORD ROAD AND TORRENCE GROVE CHURCH ROAD  
(ON TORRENCE GROVE CHURCH ROAD) (SR 2842)

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	35	°	16	'	40	"	Longitude	80	°	44	'	26	"
----------	----	---	----	---	----	---	-----------	----	---	----	---	----	---

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☐ Yes ☒ No

If Yes, give call letter(s) or file number(s) or both. \_\_\_\_\_

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any. \_\_\_\_\_

73.215  
PROCESSING

4. Does the application propose to correct previous site coordinates?

☐ Yes ☒ No

If Yes, list old coordinates.

Latitude      °      '      "	Longitude      °      '      "
-------------------------------	--------------------------------

5. Has the FAA been notified of the proposed construction?

☒ Yes ☐ No

If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No.  
1Date 25 JUNE 1992 Office where filed ATLANTA GA (ASO-532)

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	<u>DELTA (PVT)</u>	<u>6.2 KM</u>	<u>153° T</u>
(b)	<u>                    </u>	<u>                    </u>	<u>                    </u>

7. (a) Elevation: (to the nearest meter)

(1) of site above mean sea level;	<u>232</u>	meters
(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and	<u>79</u>	meters
(3) of the top of supporting structure above mean sea level [(aX1) + (aX2)]	<u>259</u>	meters

(b) Height of radiation center: (to the nearest meter) H - Horizontal; V - Vertical

(1) above ground	<u>74</u>	meters (H)
	<u>74</u>	meters (V)
(2) above mean sea level [(aX1) + (bX1)]	<u>243</u>	meters (H)
	<u>243</u>	meters (V)
(3) above average terrain	<u>100</u>	meters (H)
	<u>100</u>	meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(b)(3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator.

Exhibit No.  
2

9. Effective Radiated Power:

CENTRE OF MAIN BEAM AT 305° TRUE

(a) ERP in the horizontal plane

6.00 kw (H=) 6.00 kw (V=)

(b) Is beam tilt proposed?

☐ Yes ☒ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field.

Exhibit No.

         kw (H=)          kw (V=)

-Polarization

10. Is a directional antenna proposed?

CENTRE OF MAIN BEAM AT 305° TRUE

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of the relative field.

☒ Yes ☐ No

Exhibit No.  
3

11. Will the proposed facility satisfy the requirements of 47 C.F.R. Sections 73.316(a) and (b)?

If No, attach as an Exhibit a request for waiver and justification therefor, including amounts and percentages of population and area that will not receive 3.16 mV/m service.

☒ Yes ☐ No

Exhibit No.  
~~3~~

12. Will the main studio be within the protected 3.16 mV/m field strength contour of this proposal?

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125.

☒ Yes ☐ No

Exhibit No.  
~~3~~

13. (a) Does the proposed facility satisfy the requirements of 47 C.F.R. Section 73.207?

(b) If the answer to (a) is No, does 47 C.F.R. Section 73.216 apply?

(c) If the answer to (b) is Yes, attach as an Exhibit a justification, including a summary of previous waivers.

(d) If the answer to (a) is No and the answer to (b) is No, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose.

(e) If authorization pursuant to 47 C.F.R. Section 73.216 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following:

☐ Yes ☒ No

☐ Yes ☒ No

Exhibit No.  
~~3~~

Exhibit No.  
4

Exhibit No.  
4

(1) Protected and interfering contours, in all directions (360°), for the proposed operation.

(2) Protected and interfering contours, over pertinent areas, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as the transmitter location.

(3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.

(4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.

(5) The official title(s) of the map(s) used in the exhibit(s).

14. Are there: (a) within 50 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast (except citizens band or amateur) radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference?

☒ Yes ☐ No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. (See 47 C.F.R. Sections 73.315(b), 73.316(e) and 73.318.)

Exhibit No.  
5



15. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V (D). The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No.  
6

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.  
7

USGS 1:250 000 TOPOGRAPHIC QUADRANGLE  
CHARLOTTE, NORTH CAROLINA

- (a) the proposed transmitter location, and the radials along which profile graphs have been prepared;
- (b) the 816 mV/m and 1 mV/m predicted contours; and
- (c) the legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. - 259 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 2443 sq. km. Population 616091

18. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.

- (a) the proposed auxiliary 1 mV/m contour; and
- (b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

19. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313)*

Source of terrain data: *(check only one box below)*

☒ Linearly interpolated 30-second database ☐ 7.5 minute topographic map

(Source: DATAWORLD - NGDC)

☐ Other *(briefly summarize)*

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances	
		To the 316 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)
" 55.0°	122.9	18.1	31.1
0	105.8	16.7	29.1
45	122.9	18.1	31.1
90	117.5	17.1	29.5
135	99.7	14.8	26.4
180	92.6	15.5	27.3
225	95.6	15.8	27.7
270	84.8	14.7	26.2
315	81.1	14.4	25.6

\*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

20. Environmental Statement/See 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact?

☐ Yes ☒ No

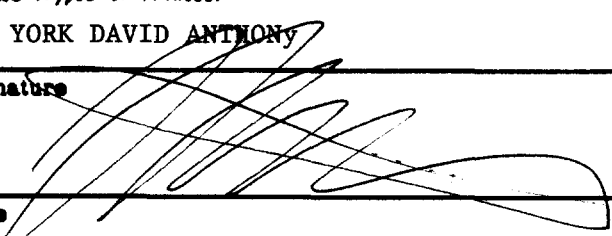
If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311.

Exhibit No.  
8

If No, explain briefly why not. Although categorically excluded under 1.1307 of the Rules, the NIER statement is presented in Exhibit 8.

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name (Typed or Printed) YORK DAVID ANTHONY	Relationship to Applicant (e.g., Consulting Engineer) CONSULTING ENGINEER
Signature 	Address (Include ZIP Code) 2613 CRAIG AVENUE CONCORD NC 28027 - 4107
Date 26 JUNE 1992	Telephone No. (Include Area Code) (704) 597 8317

ENGINEERING STATEMENT  
VICTORY CHRISTIAN CENTER, INCORPORATED  
NEW FM, HARRISBURG, NORTH CAROLINA

At the request, and on the behalf of, Victory Christian Center, Incorporated, I have been retained to present FCC Form 301, Section V-B, in support of its application for a NEW FM at Harrisburg, North Carolina. This presentation should replace in the entirety the previous engineering material associated with the VCCI application ( # 920326MA ). My qualifications as an electrical engineer are a matter of record with the Commission.

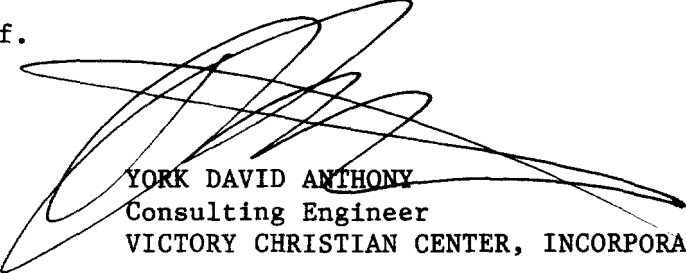
This application seeks to relocate the site approximately 2 km further south from the outstanding site. This application seeks processing under 73.215 for proposing contour protection to WZNS Dillon, South Carolina. The routine short-spacing is permitted under the Rules and is 1 km in extent. Accordingly, it is not in violation of 73.215[e] which permit shortspacing an A to a C at 143 km minimum, nor its it in violation of the former note to 73.215[e] as regards the temporary "throttling" of all shortspacing to 8 km maximum (this rule was lifted on 1 December 1991).

This application proposes a directional antenna. The custom directional antenna complies fully with 73.316 of the Rules. The proposed antenna must be oriented at 305° True (relative to the main beam which is plotted at 0° True as required in the Rules).

This application is fully in compliance with the directives and rules for NEW FM applications, and the OSHA/OET/FCC guidelines for environmental exposure.

The directional antenna is mild in extent, and will in all likelihood produce better protection of all allocations than the typical side-mounted nondirectional system.

I certify under penalty of perjury that this application was prepared by me and that the representations contained herein are true and correct to the best of my knowledge and belief.

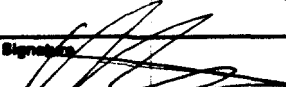
  
YORK DAVID ANTHONY  
Consulting Engineer  
VICTORY CHRISTIAN CENTER, INCORPORATED

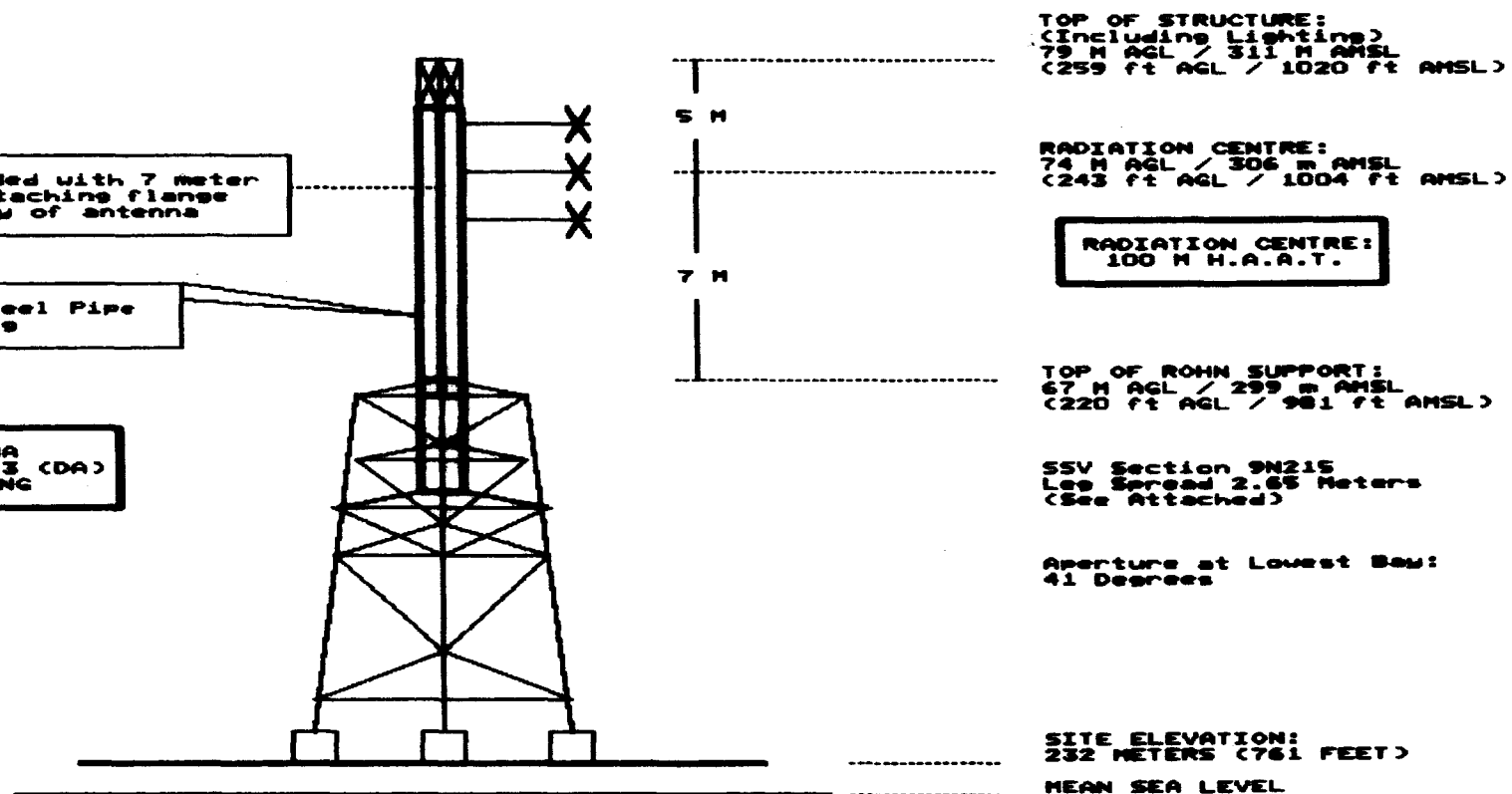
This the 26th day June, 1992

U. S. GOVERNMENT PRINTING OFFICE: 1985-494-355

DO NOT REMOVE CARBONS

Form Approved OMB No. 2120-0001

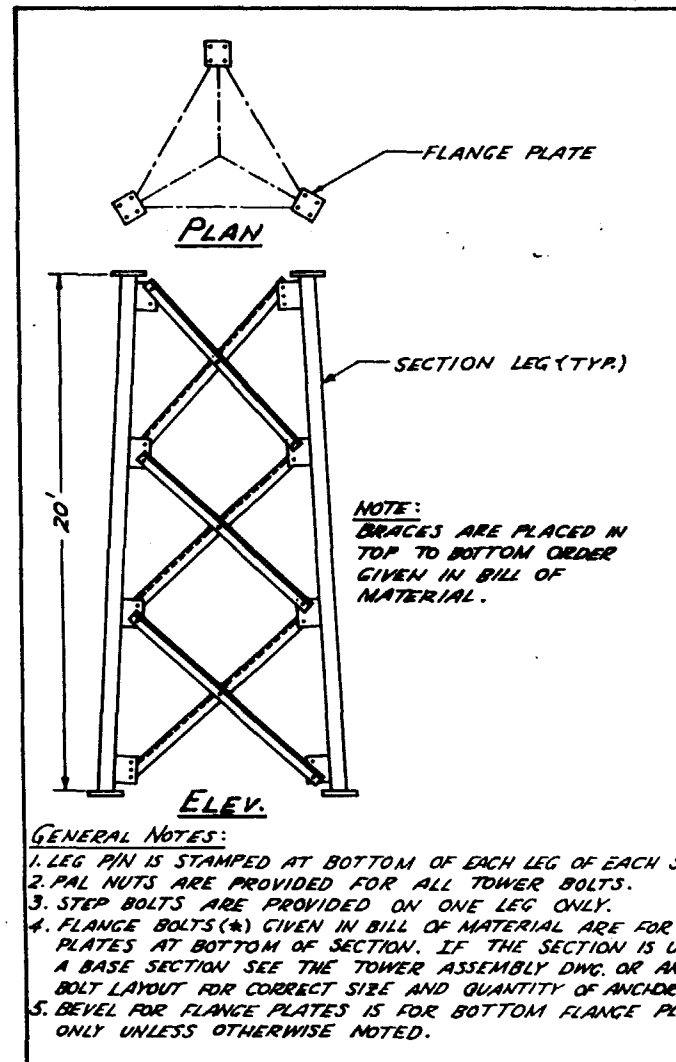
U.S. Department of Transportation Federal Aviation Administration			Aeronautical Study Number	
NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION				
<b>1. Nature of Proposal</b>			<b>2. Complete Description of Structure</b>	
A. Type <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Alteration	B. Class <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Temporary (Duration _____ months)	C. Work Schedule Dates Beginning <u>PENDING FCC</u> End <u>APPROVAL</u>	A. Include effective radiated power and assigned frequency of all existing, proposed or modified AM, FM, or TV broadcast stations utilizing this structure. B. Include size and configuration of power transmission lines and their supporting towers in the vicinity of FAA facilities and public airports. C. Include information showing site orientation, dimensions, and construction materials of the proposed structure.	
3A. Name and address of individual, company, corporation, etc. proposing the construction or alteration. (Number, Street, City, State and Zip Code) (704 ) 393 1540 area code Telephone Number  WAYNE HAMMOND, DIRECTOR VICTORY CHRISTIAN CENTER INCORPORATED 1501 I-85 SERVICE ROAD CHARLOTTE NC 28216			FM TRANSMITTING ANTENNA  92.7 mc, 6 KW MERP 3 bay directional (see attg)  Rad Ctr 243 ft AGL 1004 ft MSL TOP 259 ft AGL 1020 ft MSL  Tapered self-support tower  (If more space is required, continue on a separate sheet.)	
B. Name, address and telephone number of proponent's representative if different than 3 above.  York David Anthony (704) 597 8317 2613 Craig Avenue Concord NC 28027				
<b>4. Location of Structure</b>			<b>5. Height and Elevation (Complete to the nearest foot)</b>	
A. Coordinates (To nearest second)  35° 16' 40" Latitude 80° 44' 26" Longitude	B. Nearest City or Town, and State CHARLOTTE NC (1) Distance to 4B WITHIN Miles (2) Direction to 4B WITHIN	C. Name of nearest airport, heliport, flightpark, or seaplane base DELTA (1) Distance from structure to nearest point of nearest runway 3.6 mi (S) (2) Direction from structure to airport 153° T	A. Elevation of site above mean sea level 761	B. Height of Structure including all appurtenances and lighting (if any) above ground, or water if so situated 259 C. Overall height above mean sea level (A + B) 1020
D. Description of location of site with respect to highways, streets, airports, prominent terrain features, existing structures, etc. Attach a U.S. Geological Survey quadrangle map or equivalent showing the relationship of construction site to nearest airport(s). (If more space is required, continue on a separate sheet of paper and attach to this notice.)  0.32 KM @ 335° T FROM JUNCTION OLD CONCORD ROAD AND TORRENCE GROVE CHURCH ROAD (ON TORRENCE GROVE CHURCH ROAD) (SR 2842)				
Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1101). Persons who knowingly and willingly violate the Notice requirements of Part 77 are subject to a fine (criminal penalty) of not more than \$500 for the first offense and not more than \$2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1472(a)).				
I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards if necessary.				
Date 25 JUNE 92	Typed Name/Title of Person Filing Notice YORK DAVID ANTHONY Consulting Engineer		Signature  6.25.92	



NOT FOR CONSTRUCTION

Lambert & Anthony  
Medium Wave Transmitting Antennas  
Concord, North Carolina

Victory Christian Center, Incorporated  
Exhibit 2 Figure 1  
Tower Plan Sketch - Amendment of 6/26/92



BILL OF MATERIAL				
ITEM	QUAN.	PART NO.	DESCRIPTION	DWG. NO.
1	2	VL179	LEG (PIPE 3 1/2" EH)	B750109
2	1	VL179S	STEP LEG ( " " )	"
3	6	X91	DIAG. BRACE (2 X 2 X 3/4")	SK720320
4	6	X92	" " ( " " )	"
5	6	X93	" " ( " " )	"
6	45	2100296A	5/8 X 1 1/2 Bolt Assy (braces)	C770404
7	12	2100636A	1/8 X 3 1/2 " " (flanges)	"

MISC. INFO.							
FLANGE PLATE						SPREAD	
OFFSET	BEVEL	SIZE (TOP)	P/N	SIZE (BOTTOM)	P/N	TOP	BOTTOM
1/4	—	7X7X1	7F	7X7X1	7H	6'-6 1/8"	10'-9 1/8"

No. A	Revision	Description	Date	ABY
<b>Unarco-Rohn</b> Division of Unarco Industries, Inc.				
Scale NONE			Title <b>ASSEMBLY DETAILS</b> FOR <b>SSV SECTION 9N215</b>	
Drawn by BLJ			Date 4/29/86	
Checked by RLR			Date 4-29-86	
Approved by Engineering TS			Date 5-6-86	
Approved by Production JK			Date 5-6-86	
			Drawing Number <b>A860616</b>	

VICTORY CHRISTIAN CENTER INCORPORATED  
 NEW FM HARRISBURG, NC

EXHIBIT 2 FIGURE 2  
 TOP (PREPOLE) SUPPORT STRUCTURE FIGURE  
 6.26.92

EXHIBIT 3  
VICTORY CHRISTIAN CENTER, INCORPORATED

STATEMENT AS REGARDS 47CFR 73.316  
PROPOSED FM DIRECTIONAL ANTENNA SYSTEM SPECIFICATION

This exhibit concerns the required statements for the proposed directional antenna system required herein. The author is familiar with the requirements of 47CFR 73.316, as adopted at 54 FR 9804; and the Ordering Clauses in the Memorandum Opinion and Order, Docket 87-121 (RM 6015) adopted 28 August 1991.

Our proposed directional antenna system is designed to provide contour protection as permitted in 47CFR 73.215 of the Rules. It consists of a common Jampro JMPC-3 antenna which has been altered by its manufacturer using passive directors to achieve the desired vertical and horizontal patterns. This office will secure a mounting pole per Jampro's fabrication drawings which will be used in securing and testing the antenna at the Jampro facility in Sacramento, CA. The passive reflectors/directors will be hot-dipped galvanised and marked so that the consulting engineer can ensure that the riggers will achieve the identical configuration as at the manufacturing plant. This office will visit the Sacramento facility prior to shipment of the antenna.

The Jampro JMPC antenna is well known to the Commission and their statement of qualifications in Figure 6 of this Exhibit is also a matter of record with the FM Branch.

A full Proof of Performance, of either one or (preferably the entire) antenna bay(s) will be conducted and included in the application for station license.

Figure 1 is the relative field horizontal azimuth pattern. It is a symmetrical pattern with the maximum radiation at 0° per 73.316(c)(1). The antenna will provide circular polarisation, i.e. 1:1 axial ratio, and the vertical pattern shall not exceed the horizontal pattern in radiation beyond the permitted usual and customary tolerances (This matter is currently the subject of a rulemaking, cf. MO&O, p.8).

Figure 2 is the required tabulation for every 5° of azimuth, including the field (relative), dB attenuation, ERP in dBkW, and ERP in kW. The maxima will be 6.00 kW which corresponds to the maximum class "A" power for 100 meters.

Figure 3 is a vertical pattern which shows that no undesirable lobes will occur using this antenna. Referring to Figure 7.1 of this Exhibit, it will be seen that the antenna will be mounted at 74 m AGL. The monotonicity of the major section lying between -5 and 5 degrees is sufficient proof of no overhanging or underhanging lobes that could cause interference.

Figure 4 is a tabulation of the conical elevation pattern data, which supports Figure 3. Figure 5 is a tabulation of the proposed antenna in the actual desired orientation of 305° True. These were the values used in performing the forthcoming 73.215 allocation study, and where they differ from Figures 1 and 2 they do so at less than 0.2% (due to the 1° interpolation by the timesharing system's software). This difference is inconsequential.

Figure 6 is a manufacturers' statement as to qualifications and their responsibilities. Figure 7 shows one implementation of the finished antenna system, as well as drawings of the top section of the proposed Rohn tower. The steel pole will protrude below the plane tangent to the top section of the Rohn self-supporting tower. The face width is approximately 8.7 feet between legs. The antenna will be mounted well above these legs and should have no discernable effect on pattern performance. Should the Commission require, this section of tower can be shipped to Jampro.

The antenna will of course be mounted on a pole for maximum repeatability again according to the manufacturer's fabrication drawing.

There will be no other antennas within 20 meters of the proposed transmit antenna. No platform of any kind will be installed as contemplated in 73.316(6).

On application for license, this office, along with a licensed surveyor provided by the firm of H.C. Barrett and Associates (Victory Christian Center's architectural and engineering firm) will fully satisfy the requirements of 73.316(8).

The max/min ratio is -1.5 dB. The maximum slope is 0.3 dB per 10 degrees.

As the antenna proposed herein has a very gentle slope, it is believed that one radiation limit at 180° (relative to Figure 1) can be easily achieved in practice and that the antenna will be completely stable once properly rigged and aligned by the engineering/surveying crew. It should be noted that most nondirectional antennas that are side-mounted have much more directivity than that proposed herein.

---

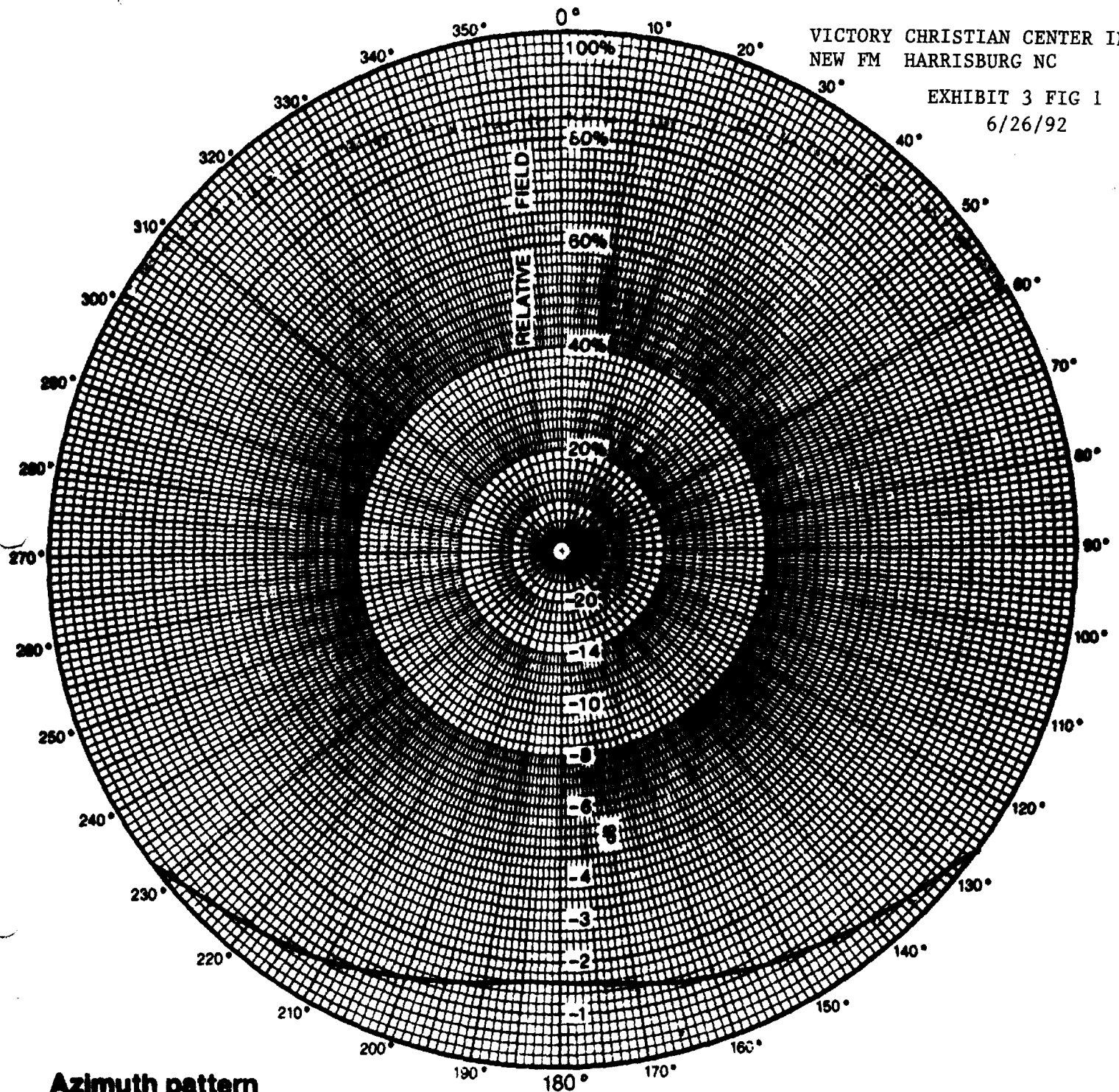
Note 1: all cables for lighting will pass through the hollow mounting pole (i.e. perfectly shielded)

Note 2: Some of Jampro's exhibits indicate 6/27/92. They were faxed here at the author's office on 6/26/92.



VICTORY CHRISTIAN CENTER INC  
NEW FM HARRISBURG NC

EXHIBIT 3 FIG 1  
6/26/92



### Azimuth pattern

Customer: VICTORY CHRISTIAN CENTER, INCORPORATED

Date: 6-27-92

Frequency: 92.7 mc Type Number: JMPC-3-Z3(DA)

Elevation Gain: TBD

Azimuth Directivity: TBD

Major Lobe Gain: TBD

Notes: Pattern envelope. 0 degrees = 305° True North

CIRCULAR POLARISATION - AXIAL RATIO TO BE 1:1 - VERT NOT TO EXCEED HORIZ RAD



6340 Sky Creek Drive, Sacramento, CA 95828  
P.O. Box 292880, Sacramento, CA 95829-2880

(916) 383-1177 Fax: (916) 383-1182

PATTERN ENVELOPE TABULATION - HORIZONTAL PLANE PATTERN

TABULATED PER 73.316 OF THE RULES

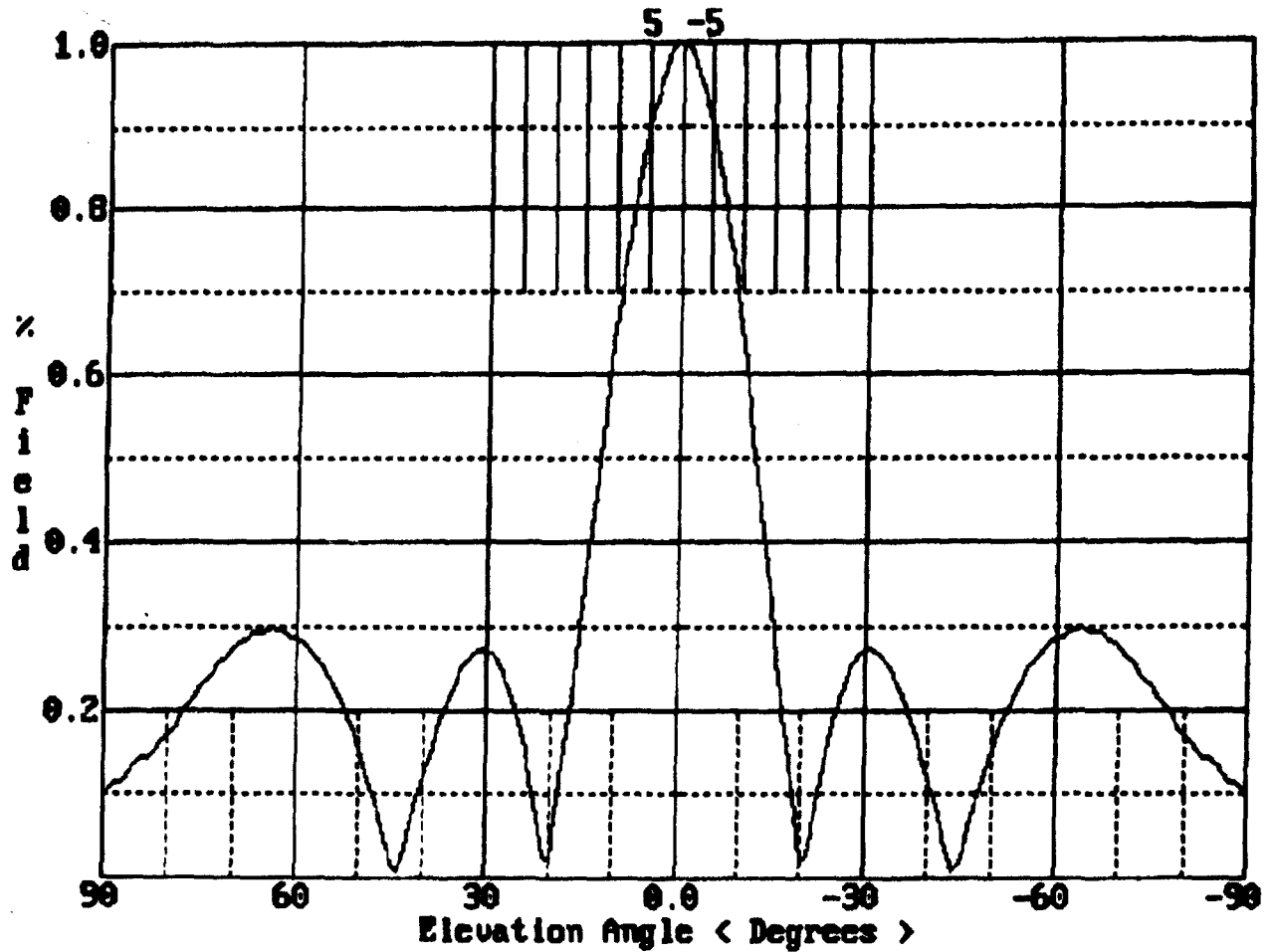
AZUMITH (deg)	RELATIVE FIELD	dB loss	POWER dBkW	kW		AZUMITH (deg)	RELATIVE FIELD	dB loss	POWER dBkW	kW	
0.0	1.000	0.000	7.781	6.000	MAXIMA	180.0	0.841	-1.500	6.281	4.247	MINIMA
5.0	1.000	0.000	7.781	6.000		185.0	0.841	-1.500	6.281	4.247	
10.0	1.000	0.000	7.781	6.000		190.0	0.856	-1.350	6.431	4.396	
15.0	1.000	0.000	7.781	6.000		195.0	0.871	-1.200	6.581	4.551	
20.0	1.000	0.000	7.781	6.000		200.0	0.886	-1.050	6.731	4.710	
25.0	1.000	0.000	7.781	6.000		205.0	0.901	-0.900	6.881	4.876	
30.0	1.000	0.000	7.781	6.000		210.0	0.917	-0.750	7.031	5.048	
35.0	1.000	0.000	7.781	6.000		215.0	0.933	-0.600	7.181	5.225	
40.0	1.000	0.000	7.781	6.000		220.0	0.949	-0.450	7.331	5.408	
45.0	1.000	0.000	7.781	6.000		225.0	0.966	-0.300	7.481	5.598	
50.0	1.000	0.000	7.781	6.000		230.0	0.983	-0.150	7.631	5.796	
55.0	1.000	0.000	7.781	6.000		235.0	1.000	0.000	7.781	6.000	
60.0	1.000	0.000	7.781	6.000		240.0	1.000	0.000	7.781	6.000	
65.0	1.000	0.000	7.781	6.000		245.0	1.000	0.000	7.781	6.000	
70.0	1.000	0.000	7.781	6.000		250.0	1.000	0.000	7.781	6.000	
75.0	1.000	0.000	7.781	6.000		255.0	1.000	0.000	7.781	6.000	
80.0	1.000	0.000	7.781	6.000		260.0	1.000	0.000	7.781	6.000	
85.0	1.000	0.000	7.781	6.000		265.0	1.000	0.000	7.781	6.000	
90.0	1.000	0.000	7.781	6.000		270.0	1.000	0.000	7.781	6.000	
95.0	1.000	0.000	7.781	6.000		275.0	1.000	0.000	7.781	6.000	
100.0	1.000	0.000	7.781	6.000		280.0	1.000	0.000	7.781	6.000	
105.0	1.000	0.000	7.781	6.000		285.0	1.000	0.000	7.781	6.000	
110.0	1.000	0.000	7.781	6.000		290.0	1.000	0.000	7.781	6.000	
115.0	1.000	0.000	7.781	6.000		295.0	1.000	0.000	7.781	6.000	
120.0	1.000	0.000	7.781	6.000		300.0	1.000	0.000	7.781	6.000	
125.0	1.000	0.000	7.781	6.000		305.0	1.000	0.000	7.781	6.000	
130.0	0.983	-0.150	7.631	5.796		310.0	1.000	0.000	7.781	6.000	
135.0	0.966	-0.300	7.481	5.598		315.0	1.000	0.000	7.781	6.000	
140.0	0.949	-0.450	7.331	5.408		320.0	1.000	0.000	7.781	6.000	
145.0	0.933	-0.600	7.181	5.225		325.0	1.000	0.000	7.781	6.000	
150.0	0.917	-0.750	7.031	5.048		330.0	1.000	0.000	7.781	6.000	
155.0	0.901	-0.900	6.881	4.876		335.0	1.000	0.000	7.781	6.000	
160.0	0.886	-1.050	6.731	4.710		340.0	1.000	0.000	7.781	6.000	
165.0	0.871	-1.200	6.581	4.551		345.0	1.000	0.000	7.781	6.000	
170.0	0.856	-1.350	6.431	4.396		350.0	1.000	0.000	7.781	6.000	
175.0	0.841	-1.500	6.281	4.247		355.0	1.000	0.000	7.781	6.000	

VICTORY CHRISTIAN CENTER INC  
NEW FM HARRISBURG NC  
EXHIBIT 3 FIGURE 2 6/26/92



VICTORY CHRISTIAN CENTER INC  
NEW FM HARRISBURG NC  
EXHIBIT 3 FIGURE 3 6/26/92

### ELEVATION PATTERN



JAMPRO ANTENNAS

Customer: VICTORY CHRISTIAN CENTER INC date: 6/26/92

Frequency: 92.7 Type: JMPC-3-Z3(DA) Bays: 3 Spacing: 1.0 wave

Beam tilt: 0 Null fill: 0 %

Notes: Elevation pattern plotted in relative field



VICTORY CHRISTIAN CENTER INC  
EXHIBIT 3 FIGURE 4  
NEW FM HARRISBURG NC  
6/26/92

TABLE OF FIELD STRENGTH FOR : Z3

INCREMENTAL DEGREES

	0	1	2	3	4	5	6	7	8	9
+	1.00	1.00	.99	.96	.93	.90	.86	.81	.77	.71
-	1.00	1.00	.99	.96	.93	.90	.86	.81	.77	.71
-10	.66	.59	.52	.46	.39	.33	.26	.20	.14	.08
E -20	.02	.03	.07	.12	.15	.19	.22	.24	.26	.27
G -30	.27	.28	.27	.26	.25	.23	.22	.20	.17	.15
R -40	.12	.09	.07	.04	.01	.02	.05	.07	.10	.13
E -50	.15	.17	.19	.21	.23	.24	.26	.26	.28	.28
E -60	.29	.29	.29	.30	.30	.29	.29	.29	.28	.28
S -70	.28	.26	.26	.24	.24	.23	.21	.21	.20	.18
-80	.17	.16	.15	.14	.14	.14	.13	.12	.12	.11
-90	.10									

Customer: VICTORY CHRISTIAN CENTER INCORPORATED date: 6/26/92

Frequency: 92.7 Type: JMPC-3-Z3(DA) Days: 3 Spacing: 1.0 wave

Beam tilt: 0 Null fill: 0 %

Notes: Elevation pattern plotted in relative field

TABULATION ( THE PROPOSED DIRECTIONAL ANTENNA  
ORIENTED AT 305° T (MAXIMA)

THIS IS NOT THE 73.316 STUFF

Lambert & Anthony  
Concord, North Carolina

Page 1  
June 26, 1992

HAAT and ERP values for study site

Title: Victory Christian Center      Latitude: 35-16-40  
ERP: 6 kW      HAAT: 100.0 m      Longitude: 80-44-26  
User-defined directional antenna pattern

Az. HAAT	Rel	ERP	Az. HAAT	Rel	ERP	Az. HAAT	Rel	ERP	Az. HAAT	Rel	ERP
deg (m )	fld (kW)		deg (m )	fld (kW)		deg (m )	fld (kW)		deg (m )	fld (kW)	
0	106	1	6	45	123	1	6	90	118	.933	5.22
1	106	1	6	46	123	1	6	91	117	.93	5.19
2	106	1	6	47	123	1	6	92	117	.927	5.15
3	106	1	6	48	123	1	6	93	116	.924	5.12
4	108	1	6	49	123	1	6	94	116	.92	5.08
5	110	1	6	50	123	1	6	95	115	.917	5.05
6	112	1	6	51	123	1	6	96	115	.914	5.01
7	112	1	6	52	123	1	6	97	116	.911	4.98
8	111	1	6	53	123	1	6	98	116	.908	4.94
9	110	1	6	54	123	1	6	99	115	.905	4.91
10	110	1	6	55	123	1	6	100	114	.901	4.88
11	110	1	6	56	123	1	6	101	112	.898	4.84
12	111	1	6	57	124	1	6	102	111	.895	4.81
13	111	1	6	58	125	1	6	103	110	.892	4.78
14	112	1	6	59	126	1	6	104	110	.889	4.74
15	112	1	6	60	126	1	6	105	109	.886	4.71
16	112	1	6	61	126	1	6	106	109	.883	4.68
17	112	1	6	62	125	1	6	107	109	.88	4.65
18	112	1	6	63	125	1	6	108	109	.877	4.61
19	112	1	6	64	125	1	6	109	109	.874	4.58
20	112	1	6	65	125	1	6	110	109	.871	4.55
21	112	1	6	66	126	1	6	111	109	.868	4.52
22	113	1	6	67	126	1	6	112	110	.865	4.49
23	113	1	6	68	126	1	6	113	110	.862	4.46
24	114	1	6	69	126	1	6	114	110	.859	4.43
25	114	1	6	70	126	1	6	115	110	.856	4.4
26	114	1	6	71	126	.996	5.96	116	110	.853	4.37
27	115	1	6	72	126	.993	5.92	117	110	.85	4.34
28	116	1	6	73	125	.99	5.88	118	110	.847	4.31
29	116	1	6	74	125	.986	5.84	119	110	.844	4.28
30	117	1	6	75	124	.983	5.8	120	110	.841	4.25
31	118	1	6	76	124	.979	5.76	121	110	.841	4.25
32	118	1	6	77	123	.976	5.72	122	110	.841	4.25
33	119	1	6	78	122	.973	5.68	123	109	.841	4.25
34	119	1	6	79	121	.969	5.64	124	109	.841	4.25
35	120	1	6	80	121	.966	5.6	125	109	.841	4.25
36	121	1	6	81	120	.963	5.56	126	108	.841	4.25
37	121	1	6	82	120	.959	5.52	127	108	.841	4.25
38	121	1	6	83	120	.956	5.48	128	107	.841	4.25
39	121	1	6	84	119	.953	5.45	129	107	.841	4.25
40	121	1	6	85	119	.949	5.41	130	105	.841	4.25
41	121	1	6	86	119	.946	5.37	131	104	.844	4.28
42	122	1	6	87	119	.943	5.33	132	103	.847	4.31
43	122	1	6	88	119	.94	5.3	133	101	.85	4.34
44	123	1	6	89	118	.936	5.26	134	101	.853	4.37

Lambert & Anthony  
Concord, North Carolina

Page 2  
June 26, 1992

HAAT and ERP values for study site

Title: Victory Christian Center      Latitude: 35-16-40  
ERP: 6 kW      HAAT: 100.0 m      Longitude: 80-44-26  
User-defined directional antenna pattern

Az. HAAT	Rel	ERP	Az. HAAT	Rel	ERP	Az. HAAT	Rel	ERP	Az. HAAT	Rel	ERP
deg (m )	fld (kW)		deg (m )	fld (kW)		deg (m )	fld (kW)		deg (m )	fld (kW)	
180	93	1	6	225	96	1	6	270	85	1	6
181	92	1	6	226	94	1	6	271	84	1	6
182	93	1	6	227	93	1	6	272	84	1	6
183	93	1	6	228	92	1	6	273	84	1	6
184	93	1	6	229	90	1	6	274	84	1	6
185	93	1	6	230	89	1	6	275	85	1	6
186	92	1	6	231	89	1	6	276	85	1	6
187	91	1	6	232	88	1	6	277	84	1	6
188	89	1	6	233	87	1	6	278	83	1	6
189	88	1	6	234	87	1	6	279	82	1	6
190	87	1	6	235	87	1	6	280	81	1	6
191	86	1	6	236	86	1	6	281	79	1	6
192	86	1	6	237	87	1	6	282	78	1	6
193	86	1	6	238	87	1	6	283	77	1	6
194	87	1	6	239	88	1	6	284	77	1	6
195	88	1	6	240	88	1	6	285	77	1	6
196	89	1	6	241	88	1	6	286	77	1	6
197	90	1	6	242	88	1	6	287	78	1	6
198	92	1	6	243	88	1	6	288	79	1	6
199	93	1	6	244	88	1	6	289	79	1	6
200	93	1	6	245	89	1	6	290	80	1	6
201	94	1	6	246	89	1	6	291	80	1	6
202	95	1	6	247	88	1	6	292	81	1	6
203	95	1	6	248	88	1	6	293	81	1	6
204	95	1	6	249	88	1	6	294	81	1	6
205	95	1	6	250	87	1	6	295	82	1	6
206	94	1	6	251	87	1	6	296	82	1	6
207	94	1	6	252	86	1	6	297	82	1	6
208	94	1	6	253	86	1	6	298	81	1	6
209	95	1	6	254	86	1	6	299	81	1	6
210	96	1	6	255	86	1	6	300	81	1	6
211	97	1	6	256	85	1	6	301	81	1	6
212	99	1	6	257	85	1	6	302	82	1	6
213	101	1	6	258	85	1	6	303	83	1	6
214	103	1	6	259	85	1	6	304	83	1	6
215	104	1	6	260	85	1	6	305	83	1	6
216	104	1	6	261	86	1	6	306	83	1	6
217	103	1	6	262	87	1	6	307	82	1	6
218	102	1	6	263	87	1	6	308	82	1	6
219	101	1	6	264	87	1	6	309	81	1	6
220	100	1	6	265	87	1	6	310	81	1	6
221	100	1	6	266	87	1	6	311	81	1	6
222	99	1	6	267	86	1	6	312	81	1	6
223	98	1	6	268	86	1	6	313	81	1	6
224	97	1	6	269	85	1	6	314	81	1	6

VICTORY CHRISTIAN CENTER INC  
NEW FM HARRISBURG NC  
EXHIBIT 3 FIGURE 5 6/26/92



6340 Sky Creek Drive, Sacramento, California 95828  
P.O. Box 292880, Sacramento, California 95828-2880

VICTORY CHRISTIAN CENTER INC.  
EXHIBIT EE FIGURE 6 P.1  
NEW FM HARRISBURG NC 6/26/92

(916) 383-1177 FAX (916) 383-1182

DATE 6-26-92

**CIRCULARLY POLARIZED DIRECTIONAL FM ANTENNA FOR:**

VICTORY CHRISTIAN CENTER INC

STATION: \_\_\_\_\_

LOCATION: HARRISBURG NC

ANTENNA MODEL: JMPC-3 DA

**PATTERN ENVELOPE**

JAMPRO proposes to custom build and directionalize a standard FM side mount antenna to meet this stations needs. The final patterns of the Hpol and Vpol will remain within the given pattern envelope.

**DESCRIPTION OF TEST**

JAMPRO will build or utilize an exact duplicate of support structure for testing, paying close attention to details, such as including other present structures, such as climbing steps etc.

JAMPRO will preform all testing in full scale on their full scale test range. JAMPRO will add parasitics to the environment to manipulate the pattern to meet all requirements. All brackets and parasitics will be hot dipped galvanized steel to ensure good contact and long life.

JAMPRO will provide a final certification and complete installation drawings of the system when all work is completed. Customer is instructed to follow all mounting instructions and have a licensed surveyor verify the heading of the antenna boom.

All testing will be under the direct supervision of Eric Dye, JAMPRO's Staff Engineer. He holds a Bachelor of Science Degree in Electrical Engineering, and has been working with building directional antennas for 3 years.

**RULE COMPLIANCE**

JAMPRO will comply with known FCC rules including those stated directly on the stations construction permit. The rules include the following:

- 1- The licensed ERP will not be exceeded at any heading
- 2- The slope of the pattern from a protection null will not exceed 2 dB per 10 degrees azimuth
- 3- The rms of the Vpol will not exceed the rms of the Hpol
- 4- The maximum to minimum signal will not exceed 15 dB



6340 Sky Creek Drive, Sacramento, California 95828  
P.O. Box 292880, Sacramento, California 95829-2880

(916) 383-1177 FAX (916) 383-1182

### MOUNTING CONSIDERATIONS

JAMPRO instructs that no other antennas are mounted within the antenna aperture. A minimum vertical spacing of 10 feet should be kept for antennas mounted on the same mounting structure. The tower and all cables, steps, etc. should be properly RF grounded.

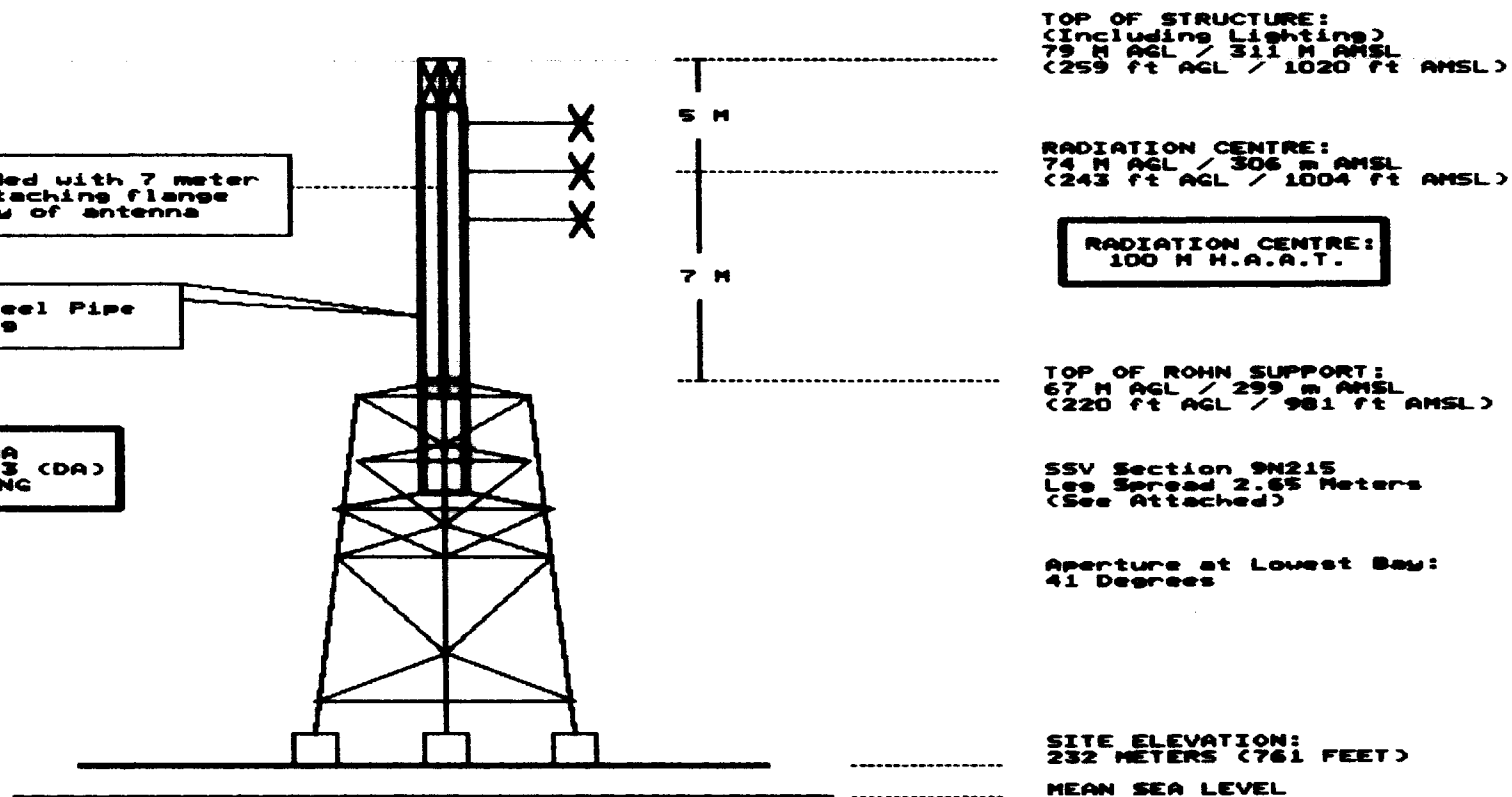
Since directional antenna systems include parasitics and special mounting brackets, standard weights and windload do not apply. For this project, the estimated specifications are:

ANTENNA WEIGHT 180 lbs

ANTENNA WINDLOAD 295 lbs (BASED ON 50/33 PSF)

### CONCLUSION

JAMPRO carefully follows good engineering principles in all aspects of this project. JAMPRO allows customers to witness all testing of their antenna. Check with the factory for scheduling.

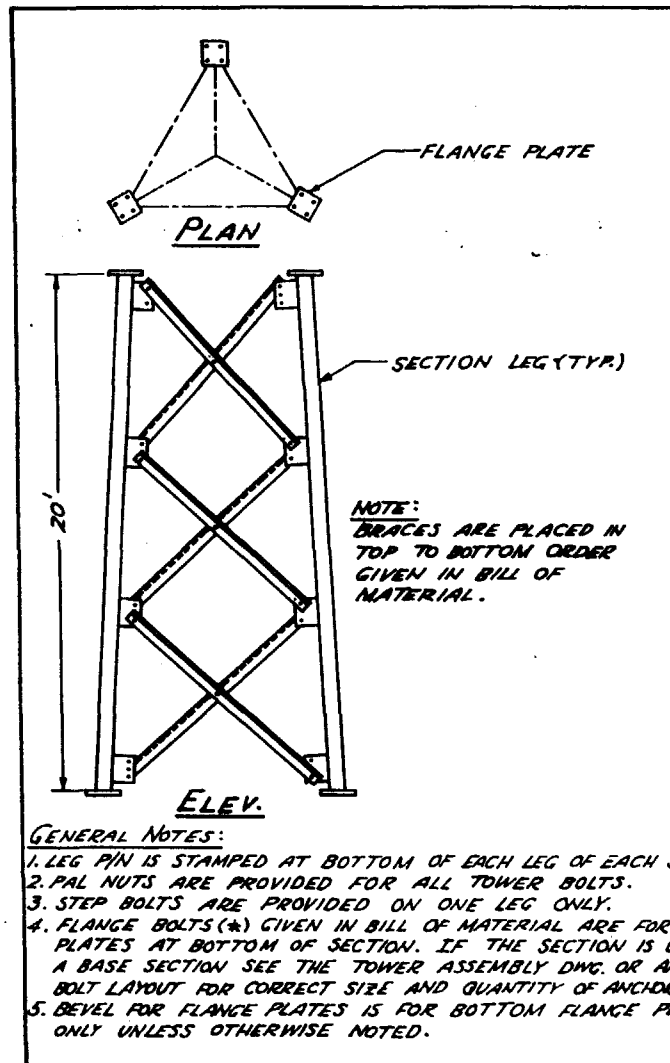


NOT FOR CONSTRUCTION

Lambert & Anthony  
Medium Wave Transmitting Antennas  
Concord, North Carolina

Victory Christian Center, Incorporated  
Exhibit 3 Figure 7 p.1  
Tower Plan Sketch - Amendment of 6/26/92





BILL OF MATERIAL				
ITEM	QUAN.	PART No.	DESCRIPTION	DWG. No.
1	2	VL179	LEG (PIPE 3 1/2" EN)	B750109
2	1	VL179S	STEP LEG ( " " )	"
3	6	X91	DIAG. BRACE (2 X 2 X 3/8)	SK720320
4	6	X92	" " ( " " " )	"
5	6	X93	" " ( " " " )	"
6	45	2100296A	5/8 X 1 1/2 Bolt Assy (braces)	C770404
7	12	2100636A	1/2 X 3 1/2 " " (flanges)	"

MISC. INFO.							
FLANGE PLATE					SPREAD		
OFFSET	BEVEL	SIZE (TOP)	P/N	SIZE (BOTTOM)	P/N	TOP	BOTTOM
1/4	—	7 X 7 X 1	7F	7 X 7 X 1	7H	8'-0 5/8"	10'-0 1/8"

No. &	Revision	Description	Date	By
<b>Unarco-Rohn</b> Division of Unarco Industries, Inc.				
Scale			Title	
NONE			ASSEMBLY DETAILS	
Drawn by			Date	
GLJ			4/29/86	
Checked by			Date	
ROR			4-29-86	
Approved by Engineering			Date	
TS			5-C-86	
Approved by Production			Date	
JC			5-C-86	
Drawing Number			A860616	

VICTORY CHRISTIAN CENTER INCORPORATED  
 NEW FM HARRISBURG, NC  
 EXHIBIT 3 FIGURE 7.2  
 TOP SUPPORTING TOWER STRUCTURE (PREPOLE)

6.26.92